

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number  
**WO 2005/049682 A1**

(51) International Patent Classification<sup>7</sup>: **C08G 12/32**,  
12/38, C09B 69/10, D21H 17/49

(21) International Application Number:  
PCT/EP2004/052869

(22) International Filing Date:  
8 November 2004 (08.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
03104242.7 18 November 2003 (18.11.2003) EP

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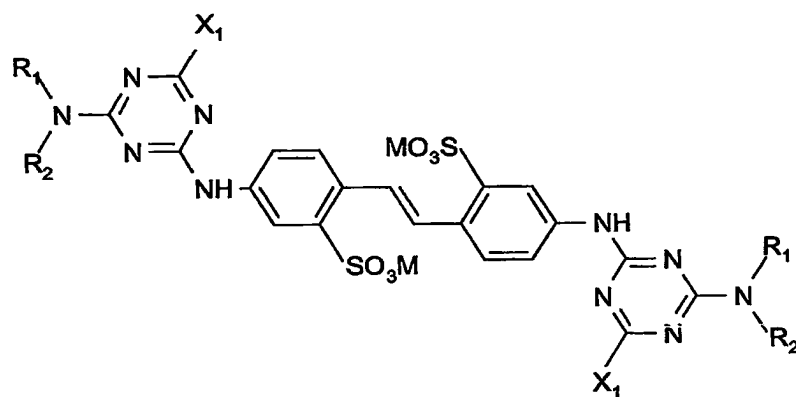
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(54) Title: FLUORESCENT WHITENING PIGMENTS



(1)

(57) Abstract: A whitening pigment comprising the reaction product of (a) a melamine-formaldehyde and/or a melamine-urea polycondensation product and (b) a water-soluble fluorescent whitening agent of the formula (1), wherein each of the two R<sub>1</sub> groups, independent of the other, represents a C<sub>1</sub>-C<sub>6</sub>alkyl or C<sub>1</sub>-C<sub>4</sub>alkyl-O-C<sub>1</sub>-C<sub>4</sub>alkyl residue, which is substituted by one or two -CONH<sub>2</sub>, -CONHC<sub>1</sub>-C<sub>4</sub>alkyl, -COOH, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1</sub>-C<sub>4</sub>alkyl or -NH<sub>2</sub> groups, each of the two R<sub>2</sub> groups, independent of the other, represents hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>2</sub>-C<sub>4</sub>hydroxyalkyl or C<sub>1</sub>-C<sub>4</sub>alkoxyC<sub>1</sub>-C<sub>4</sub>alkyl, or R<sub>1</sub> and R<sub>2</sub> together with the nitrogen atom complete a piperazine ring, each of the two X<sub>1</sub> groups, independently, represent -OH, -OC<sub>1</sub>-C<sub>4</sub>alkyl, -Oaryl or the group -NR<sub>3</sub>R<sub>4</sub>, wherein R<sub>3</sub> and R<sub>4</sub> each, independently, represent hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>2</sub>-C<sub>4</sub>hydroxyalkyl, C<sub>1</sub>-C<sub>4</sub>alkoxyC<sub>1</sub>-C<sub>4</sub>alkyl, a phenyl, phenyl mono- or disulphonic acid residue or, R<sub>3</sub> and R<sub>4</sub>, together with the nitrogen atom to which they are attached, complete a morpholino, piperidino or pyrrolidino ring or, alternatively, X<sub>1</sub> represents an amino acid residue from which a hydrogen atom has been abstracted from the amino group and M is hydrogen, an alkaline or alkaline earth metal ion, ammonium, mono- di-, tri- or tetra-substituted C<sub>1</sub>-C<sub>4</sub>alkylammonium or C<sub>2</sub>-C<sub>4</sub>hydroxyalkylammonium or mixtures thereof, a process for preparation of the pigments and the use thereof for the fluorescent whitening of paper.



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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**Published:**

— *with international search report*